

structure or methodology and therefore cannot be combined with Flynn as suggested by the Examiner.

In Yoshida, the working theory is based on a polymer dispersed liquid crystal effect. Intended color pixel elements between opposing electrodes are excited with voltages such that molecules of the related liquid crystal between the excited electrodes are aligned to allow light passage while for neighboring areas light is scattered. There is no control over the orientation of light coming in and thus light going through the unwanted areas may be scattered on to the designated color pixel areas and interact with the color in an unpredictable manner. Furthermore even though the full amount of light may or can go through a given pixel, the randomness of scattering by neighboring cells and also the uncontrollable reflection of light from the reflector may produce destructive interference. All of the foregoing produces a fringe effect lowering contrast or resolution.

In comparison, in the structure of the present invention since light goes through a particular process of polarization, the amount of light as well as its orientation is totally predictable and controllable. Specifically, the reflected light has the same polarization as impinging light due to its polarizer. By positioning a polarizer at the back of the liquid crystal layer, light can enter and exit at a predetermined polarization angle decided by the polarizer's orientation. There is no chance of randomness and reduction of intensity associated with random scattering causing a fringo effect as in the case of a polymer dispersed liquid crystal as in Yoshida. Thus, contrast and resolution are improved.

It is therefore apparent that Yoshida and its teachings are different both structurally and conceptually from the present invention. Moreover, for similar reasons Yoshida cannot suggest the necessary modification of Flynn which as in the present invention uses a pair of polarizers. At the same time it should be parenthetically mentioned that the Dalisa reference which discloses a fluorescent layer is also irrelevant being of the scattering type similar to Yoshida. See its abstract which states that when the liquid crystal material is distorted, "such alignment scatters and absorbs

light." See also figures 3 and 4 of Dalisa where scattering and no scattering is illustrated.

In summary, because the teaching of Yoshida cannot be inserted into Flynn, claim 1 is allowable. The remaining dependent claims are allowable for the same reasons.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extension of time, and/or credit any overpayment to Deposit Account No. 50-2669 (Order No. A-76718/DNM).

Respectfully submitted,

By:



Donald N. MacIntosh
Registration No. 20,316

Law Offices of Donald N. MacIntosh
180 Montgomery Street, Suite 600
San Francisco, California 94104
Telephone: (415) 984-1989

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment and Response, is being transmitted by facsimile to the Assistant Commissioner for Patents, Washington, D.C. 20231, at the following facsimile telephone number: (571) 273-8300 on

14 SEPT., 2005.


Donald N. MacIntosh